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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,844	09/30/2003	John Walker Gilmer	USCR-7-CON3	4467
22827	7590	02/14/2006	EXAMINER	
DORITY & MANNING, P.A. POST OFFICE BOX 1449 GREENVILLE, SC 29602-1449			SZEKELY, PETER A	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 02/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/674,844

**Applicant(s)**

GILMER ET AL.

**Examiner**

Peter Szekely

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-18 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-5, 7, 8 and 10-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Lan et al. 6,232,388.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lan et al. 6,232,388.
5. The 1.131 Declaration by Dr. Gilmer has no probative value, since Exhibit B, the WAXD profile has not been found in the application. Accordingly, the rejections imposed in the previous Office action are maintained in their entirety.
6. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barbee et al. 6,486,252, Beall et al. 5,698,624 or Barbee et al. 6,034,163, in view of Allied-Signal WO 93/04118.
7. Barbee et al. ('252) disclose layered clay and an expanding agent in claim 1, oligomeric polyamide expanding agent in claim 10, matrix polymers in claim 11, polyester polymer in claim 12, clay concentration in claim 13, polyamide polymer in claim 14, having the same polymer and expanding agent in claim 15 and poly(m-xylene adipamide) in claim 18. For polyesters containing terephthalic acid and ethylene glycols

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as expanding agents see column 7, lines 33-51, for matrix polymers of the same composition see column 8, lines 5-55. For PET matrix and polyester oligomer expanding agent see Examples 2 and 3. Beall et al. teach a matrix polymer, clay and an intercalant polymer, with their concentrations in claim 1, polyamide and PET as matrix polymers in claim 15, poly(m-xylylene adipamide) in column 12, line 5 and the interchangeable use of intercalant polymer and intercalant oligomer in column 3, lines 1-27. Barbee et al. ('163) recite everything Barbee et al. ('252) disclose, with the exception of the poly(m-xylene adipamide). However, Allied-Signal, which is incorporated by reference by Barbee et al. ('163) displays poly(m-xylene adipamide) on page 27, in line 7. It would have been obvious to one having ordinary skill in the art; at the time the invention was made, to select applicants' ingredients from a list of equivalents.

8. All other rejections are withdrawn by the examiner.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 7:00 a.m.-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Peter Szekely  
Primary Examiner  
Art Unit 1714

P.S.  
2/7/06